APRIL/MAY 2024

23PSCH25B — INDUSTRIAL CHEMISTRY

Time : Three hours Maximum : 75 marks

Shanmuga Industries Arts & Science College T.V.Malai

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define control charts.
2. Write a short notes on principles of GLP.
3. Give the types of distillation process.
4. What are drying process?
5. List the factors affecting the rate of filtration.
6. Define gas stripping.
7. What are pulverization?
8. Mention the importance of auto reduction.
9. Make a use of operational control process.
10. Write a advantages of waste water treatment.

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Explain the concepts of quality assurance and quality management system.

Or

(b) Describe the tools and mechanism of ICH guidelines on drug substances and products.

12. (a) Summarize the general equipment for distillation and types of distillation processes.

Or

(b) Explain the application of evaporation in chemical process industries.

13. (a) Justify the equipments of bag filters and candle filters.

Or

(b) Elaborate the characteristics of ideal filter acids.

14. (a) Construct the flotation process and chemical methods-calcination.

Or

(b) Write briefly on refining methods of polling, parting and electrolyte refining.

15. (a) Discuss the industrial hazards and safety.

Or

(b) Justify the effluent quality standards and laws.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Illustrate the principles of GLP, GMP in drugs and pharmaceutical industries.

17. Compare the advantages and disadvantages of steam distillation.

18. What are the factors affecting the rate of filtration and choice of filter media.

19. Explain metallurgical extraction? Write a notes on refining the following metals from their important ores:

(a) Lead from galena

(b) Zinc from Zinc blende

20. Interpret the concepts of molecular sensors its properties and its applications.

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